

SAFE WORK PROCEDURE

A62 Under Bridge Inspection Unit - Bucket Evacuation

NOTE: This process may not cover every possible instance. Before starting STOP assess the situation and ensure all necessary hazard controls are in place.

If you require additional information, or clarification, please speak with your immediate supervisor or contact the Public Works Safety Branch, 108 – 1155 Pacific Avenue, 986 – 3122

Date Developed: December 3, 2013

Date of Revisions: November 8, 2016

Hazards Present:	Personal Protective Equipment (PPE):	Additional Training Requirements:
<ul style="list-style-type: none"> • Collisions with vehicles (roadway, waterway, railway) • Slips / Trips / Falls • Electrocutation • Drowning • Pinch Points 	<ul style="list-style-type: none"> • Safety Footwear • Hard Hat • Safety (traffic) Vest • Harness, Lanyard, Shock Absorber, Carabiners • Personal Floatation Device (as req'd) • Bucket Evacuation Equipment 	<ul style="list-style-type: none"> • Emergency CPR/1st Aid • Fall Protection & Bucket Evacuation • Class 3 Drivers License with air brake endorsement • A62 Operators Permit • C.O.W. Manual of Temporary Traffic Control • Use & Care of PFD's • Use & Care of Fire Extinguishers

GENERAL

SWP_PW_E_B_A62 Under Bridge Inspection Unit – Bucket Evacuation_12_03_2013

APPLICATION

This safe work procedure is intended to provide a general overview of the A62 Under Bridge Inspection Unit Bucket Evacuation process including the required personal protective equipment, training requirements and hazards present.

! IMPORTANT NOTE !

ALL INEXPERIENCED (JUNIOR) CITY OF WINNIPEG STAFF AND/OR ALL NON CITY OF WINNIPEG STAFF WHO ARE REQUIRED TO PERFORM WORK FROM THE A62 UNDER BRIDGE INSPECTION UNIT'S BUCKET MUST COMPLETE AN A62 UNDER BRIDGE INSPECTION UNIT ORIENTATION PRIOR TO ENTERING THE BUCKET AND MUST BE INFORMED THAT DUE TO AN EMERGENCY, EQUIPMENT MALFUNCTION, ETC., ALL OCCUPANTS MAY BE REQUIRED, AT ANY TIME, TO EVACUATE THE BUCKET IMMEDIATELY.

SAFE WORK PROCEDURE

PROTECTIVE MEASURES / REQUIRED STEPS, etc.

- 1) Pre-trip all bucket evacuation equipment before the A62 leaves the shop to go to site.
- 2) Once pre-trip is complete, ensure all equipment is stowed correctly in their respective bags and transported to site in the above deck, vented compartment on the A62.
- 3) Upon arrival to site, when the bucket has been unfolded and it is safe to do so, transfer all bucket evacuation equipment from the vented compartment into the bucket.
- 4) Inspect and don all required PPE.
- 5) Complete orientation with any new and/or inexperienced passengers.
- 6) Begin to perform daily duties.
- 7) When/if an emergency arises, commence bucket evacuation procedures as follows:
NOTE: Experienced/trained employees MUST assist all junior employees and/or visitors in evacuating the bucket first.
- 8) Kill power to bucket.
- 9) Inform A62 Driver of the emergency and that you are commencing bucket evacuation procedures.
- 10) Ensure that all personal lanyards are still secured to harnesses and bucket anchors.
- 11) Unpack bucket evacuation equipment and secure to bucket anchors.
- 12) Attached the Anthron (descending device) to the front D-ring of harness.
NOTE: Bucket gate must remain closed until all evacuation equipment is secured to bucket anchors.
- 13) Open bucket gate and throw unattached end of repelling rope and rope ladder out of bucket.
- 14) Ensure rope and ladder are hanging freely and are not tangled with each other or anything else.
- 15) Thread repelling rope through the attached Anthron, ensuring to leave enough slack to exit the bucket easily, and then "lock off" Anthron
NOTE: Ensure the Anthron is threaded correctly before exiting bucket. Incorrect threading will not allow you to descend.
- 16) Turn and back out of bucket, ensure three point contact with the exterior bucket handles and step.
- 17) Climb down rope ladder until slack is out of repelling rope.
- 18) Sit into your harness and move rope ladder out of your way, to ensure that you do not get tangled when beginning your decent.
- 19) Unhook personal lanyard from harness.
- 20) Unlock Anthron with operating hand and keep rope in non-operating hand down at your hip.
NOTE: Only operate the Anthron with one hand and keep the other down by hip to avoid the potential of your non-operating hand being pulled into the Anthron
- 21) Squeeze Anthron slowly to begin descent and always watch below as you are descending to avoid impacting too hard.
- 22) When on the ground unhook Anthron from front D-ring and move to a safe location.
NOTE: If there are remaining passengers in the bucket DO NOT unthread Anthron from repelling rope, as remaining passengers will pull up the rope with Anthron attached and repeat the evacuation procedure until all passengers are out of the bucket.

SUPERVISOR RESPONSIBILITY

- The supervisor will ensure that all workers are trained on the existing or potential hazards during the course of work.
- The supervisor will ensure all workers are trained on the appropriate procedures to mitigate hazards.
- Supervisor will ensure that all workers are provided with the required personal protective equipment.
- The supervisor will ensure that all workers are following all prescribed rules to keep themselves and other workers at the job site safe.

WORKER RESPONSIBILITY

- All workers will participate in the training required to keep informed of all hazards and risks.
- All workers will follow all safety rules to protect their own safety and health and of other personnel on work site.
- All workers will wear the prescribed personal protective equipment required while on the job site.

SAFE WORK PROCEDURE

Other Information Sources (i.e. Standards\Applicable Legislation)

The Manitoba Workplace Safety and Health Act W210
The Manitoba Workplace Safety and Health Regulations 217/2006

This Safe Work Procedure will be reviewed any time the task, equipment, or materials change and at a minimum every three years

SAFE WORK PROCEDURE

Exiting the A62 Elevating Platform (bucket)

NOTE: This process may not cover every possible instance. Before starting STOP assess the situation and ensure all necessary hazard controls are in place.

If you require additional information, or clarification, please speak with your immediate supervisor or contact the Public Works Safety Branch, 108 – 1155 Pacific Avenue, 986 – 3122

Date Developed: January 20, 2016

Date of Revisions:

Hazards Present:	Personal Protective Equipment (PPE):	Additional Training Requirements:
<ul style="list-style-type: none"> • Slips/Trips/Falls • Pinch Points • Sprains/Strains • Collisions with vehicles • Entanglement • Drowning 	<ul style="list-style-type: none"> • Gloves • Hard Hat • Safety Footwear • Approved Class II or III High Vis Safety Apparel • Harness c/w shock absorber, lanyard & carabiners • Eye protection • Personal Floatation Device (PFD) - as required • Bucket Evacuation Equipment 	<ul style="list-style-type: none"> • A62 Operators permit • Pre & Post Trip Inspections • Fall Protection • A62 Bucket Evacuation • Use & Care of PFD's • Use & Care of Fire Extinguishers • MTTC • First Aid

GENERAL

SWP_PW_E_B_Exiting the A62 Elevating Platform_26_01_2016

APPLICATION

This safe work procedure is intended to provide a general overview for exiting the elevating platform of the A62 Underbridge Inspection Unit, including the required personal protective equipment, training requirements and hazards present.

PROTECTIVE MEASURES / REQUIRED STEPS, etc.

- 1) Pre-trip the A62 Underbridge Inspection Unit and all bucket evacuation equipment before leaving the shop to go to site. Ensure all elevating platform (bucket) steps are folded up in the the closed position and locked.
- 2) At site, inspect & don all required Personal Protective Equipment (PPE) and complete A62 Orientation with any new and/or inexperienced passengers.
- 3) Un-stow the A62 elevating platform, enter the platform closing the gate behind the last passenger and attach/secure primary lanyard to appropriate anchorage point. Fall protection equipment must be used at all times and remain secured at all times while in the platform.
- 4) Operate elevating platform to desired location under the structure, ensuring that the elevating platform is placed directly against a solid vertical face, such as a pier face or abutment wall.
- 5) Once platform is in place against a vertical face, disable the platform controls, unlock and fold down, only the step(s) that are immediately adjacent to the solid vertical face, keeping hands and fingers away from hinge assembly of the step to avoid pinch point injuries. Working from the side of the bucket that is against the vertical face will reduce the chance of falling from the platform.
- 6) Visually check the step(s) for debris and/or fluids. If present, remove prior to placing foot on to step to reduce the chance of slipping from the step.
- 7) Attach secondary lanyard to anchor point on structure (where possible). Ensure primary lanyard remains anchored to the platform until secondary lanyard is securely attached to the structure. Once the secondary lanyard is secure the primary lanyard can be detached only if required. **NOTE: If there are no anchor points on the structure, the primary lanyard must remain anchored to the platform**
- 8) Place foot on entire step and step up to exit the platform, maintaining three point contact for as long as possible while stepping up. Ensure that hands and/or fingers are not placed between the platform and the vertical face of the structure.

SAFE WORK PROCEDURE

- 9) Climb onto structure and manoeuvre into a stable position that will minimize the need for further movements while on the structure
- 10) Perform necessary structure monitoring and/or inspection task(s). **NOTE: Workers are not permitted to perform any maintenance tasks (i.e working with any tools) while utilizing platform steps.**
- 11) Once task(s) are complete, climb back into the platform onto the platform steps, maintaining three point contact and ensuring that hands and/or fingers are not placed between the platform and the vertical face of the structure.
- 12) Re-attach primary lanyard to and detach secondary lanyard from structure and store appropriately in platform to ensure there is no chance of entanglement with workers in the platform.
- 13) Step down to platform floor, fold up step(s) to the closed position and lock off. Keep hands and fingers away from hinge assembly of the step to avoid pinch point injuries. Ensure all platform steps are locked off when not in use.

SUPERVISOR RESPONSIBILITY

- Supervisor will ensure that only inspection/monitoring tasks are performed while outside of the platform.
- Supervisor will ensure that all workers are trained on the existing or potential hazards during the course of work
- Supervisor will ensure all workers are trained on the appropriate procedures to mitigate hazards
- Supervisor will ensure that all workers are wearing the required personal protective equipment
- Supervisor will ensure that all workers are following all prescribed rules to keep themselves and other workers at the job site safe

WORKER RESPONSIBILITY

- All workers will participate in the training required to keep informed of all hazards and risks
- All workers will follow all safety rules to protect their own safety and health and of other workers on work site
- All workers will wear the prescribed personal protective equipment required while on the job site.

Other Information Sources (i.e. Standards\Applicable Legislation)

The Manitoba Workplace Safety and Health Act W210
The Manitoba Workplace Safety and Health Regulations 217/2006
A62 Underbridge Inspection Unit Operators Manual
ANSI 92.8 (1998)

This Safe Work Procedure will be reviewed any time the task, equipment, or materials change and at a minimum every three years

A62 VISITOR ORIENTATION

NOTE: This document is intended to inform visitors of the general hazards involved with the use of the Aspen Aerials A62 Bridge Inspection Unit. In no way is this document intended to be used as a training tool or allow any individual to operate this unit. If you require additional information, contact:

The Public Works Safety, Health and Operator Training Branch
105 – 1155 Pacific Avenue, Phone: 986 - 3122, Fax: 986 – 7106

GENERAL

This procedure is intended to ensure all necessary steps are followed, protecting the individual involved, other staff, and the general public from potential injury or damage resulting from the operation of this equipment and the performance of related tasks.



ⓘ OPERATING PRECAUTION ⓘ

This machine can move rapidly.
New & Experienced operators must exercise extreme caution.
KNOW YOUR APPROACH LIMITS before operating any function.



APPLICATION

The Under Bridge Inspection unit is a unique piece of equipment in which many factors can influence the safe operation. Visitors must be aware of the hazards present, PPE required, protective measures required along with the basic use of this units communications system

HAZARDS PRESENT

- Pinch Points
- Slips, Trips, Falls
- Electrocutation
- Drowning
- Collisions with vehicles (roadway, waterway or railway)
- Platform isolation

PERSONAL PROTECTIVE EQUIPMENT (PPE) REQUIRED

- Safety Footwear
- Hard Hat
- Fall Protection Harness , Shock Absorbing Lanyard, Carabiner
- Safety (traffic) Vest
- Eye Protection
- Respiratory Protection (as required)
- Personal Flotation Device (as required)
- Hearing Protection (as required)

PROTECTIVE MEASURES

- Wear all required PPE
- Stay tied off at all times when in bucket
- Pinch points between the bucket and bridge piers and bridge underside are always a concern. **KEEP ALL BODY PARTS WITHIN BUCKET UNLESS PERMITTED BY BUCKET OPERATOR.**

EMERGENCY SITUATIONS: Communication between the A62 bucket and the top man is maintained through video and audio surveillance. Should you ever need to communicate with the top man, speak loudly and clearly into the intercom. If no response is experienced ensure dial knob is “On” and toggle switch is on “Speaker”. Bucket Operator will point out intercom to familiarize you with the system.

A62 VISITOR ORIENTATION